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PLANT PEST INFORMATION UPDATES
JANUARY 1986

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U.S. Department of Agriculture (USDA)
Animal and Plant Health Inspection Service (APHIS)
Plant Protection and Quarantine (PPQ)

NEW PEST ADVISORY GROUP (NPAG)
PLANT PEST ACTIVITY FROM OCTOBER THROUGH DECEMBER 1985

NEW PLANT PESTS

EGYPTIAN COTTONWORM DETECTED IN THE UNITED STATES

Egyptian cottonworm was detected for the first time in the United States in Ohio near Akron, Summit County. Its presence was discovered in the fall of 1985 when control measures proved ineffective against larval infestations at a wholesale greenhouse operation. Larvae were collected from geraniums and tentatively identified as the exotic Spodoptera littoralis (Boisduval), Lepidoptera: Noctuidae, by R. Rings (Ohio Agricultural Research and Development Center (OARDC), retired) and R. K. Lindquist (OARDC). D. M. Weisman (Systematic Entomology Laboratory, Biosystematics and Beneficial Insects Institute, Agricultural Research Service (SEL, BBII, ARS)) confirmed the identification and notified PPQ on December 30. To date, all stages of Egyptian cottonworm have infested the two greenhouses growing cuttings of fuchsia, geranium, and verbena. Large shipments of these cuttings had been imported from Israel in September, October, and December 1985.

Egyptian cottonworm occurs in the African, Mediterranean, and Near Eastern regions. The nocturnal larvae feed voraciously on many crop plants belonging to the Brassicaceae, Solanaceae, Cucurbitaceae, Fabaceae, Poaceae, as well as citrus, pome fruit trees, cotton, grapes, and ornamentals.

PPQ is conducting an onsite review of the propagative facilities of concern in Israel, reviewing imports of plant propagative material from these facilities, and reviewing records of Spodoptera interceptions at PPQ inspection stations. State and Federal officials will issue an emergency action order to prevent movement of infested material from the greenhouses in Ohio.

YELLOW SPOT OF SUGARCANE NEW TO UNITED STATES

Yellow spot, one of the serious leaf diseases of sugarcane, has been detected for the first time in the United States in Florida. Symptoms were first noted in a small planting of sugarcane (cv. CL 72-895) near Canal Point, Palm Beach County, on October 18, 1985, by E. Rice (United States Sugar Corporation). His survey of the corporation property revealed infestations on the eastern and southern side of Lake Okeechobee from Canal Point to Lake Harbor. Six cultivars are affected, two of which are commercial cvs., CL 59-1052 and CL 68-575. The pathogen was identified as Mycovellosiella koepkei (Kruger) Deighton, Hyphomycetes, by M. S. Irey (United States Sugar Corporation), and confirmed by T. Schubert (Division of Plant Industry, Florida Department of Agriculture and

Consumer Services (DPI, FDACS)) and by M. Palm (PPQ) on December 12, 1985. This pathogen is recorded from sugarcane (Saccharum spp.) from various countries in Africa, Asia, Oceania, and the Caribbean. Reports from other parts of the Western Hemisphere south of the United States are in question. NPAG is compiling information to determine a course of action.

CARROT NEMATODE IN THE UNITED STATES

A carrot nematode new to the United States was reported in Michigan (L. S. O. Graney, *Journal of Nematology* 17(4):519; 1985). G. S. Bird (Michigan State University (MSU) first noted the nematode in 1980 in an onion field in Grant, Newaygo County. In 1984, the nematode was redetected in the same field and detected in high populations in a field 8 km away. In the summer of 1985, surveys revealed high populations widely distributed in the carrot areas of Lapeer, Montcalm, and Newaygo Counties. Specimens were identified as Heterodera carotae Jones (Tylenchida: Heteroderidae) in August 1984 by L. S. O. Graney (MSU) and confirmed by A. M. Golden (ARS). G. Bird believes it has been present for many years and is probably widespread where carrot grows. NPAG is compiling information to determine a course of action.

Carrot nematode is a serious pest of carrots in Europe and India. Tap roots of infested carrots often appear smaller, deformed, hairy, and branched at the root apex. Hosts include carrot and other wild forms of Daucus carota.

EUCALYPTUS BORER NEW TO THE UNITED STATES

Eucalyptus borer was detected for the first time in the United States in California. Larvae of Phoracantha semipunctata (Fabricius), Coleoptera: Cerambycidae, were first collected in El Toro, Orange County, on November 3, 1984. Specimens were collected from a grove of dying and dead Eucalyptus spp. by M. Bennett and J. Wynn (Orange County, California Agricultural Commissioner's Office). The larvae were identified as near this species by J. A. Chemsak (University of California). To make a positive identification, larvae, pupae, and adults were collected in March 1985. These were identified as this species by F. G. Andrews (California Department of Food and Agriculture (CDFA)) on April 5, 1985, and confirmed by R. E. White (SEL, BBII, ARS) on April 16. The NPAG was notified on December 13. The infested area includes Los Angeles, Orange, San Diego, and Riverside Counties. NPAG is compiling information to determine the course of action for this pest.

This native of Australia is widely distributed where eucalyptus grows in Oceania, Africa, the Near East, southern Europe, and South America. It has been introduced in eucalyptus trees and lumber. This serious eucalyptus pest infests trees under some stress and freshly cut timber but does not attack dry wood. It infests two other genera in the Myrtaceae, Angophora and Syncarpia.

BLACK PARLATORIA SCALE IN MAINLAND UNITED STATES

Black parlatoria scale was first discovered in the conterminous United States on October 7, 1985, in Florida. Specimens were collected from a sour orange tree at a residential property in northeast Miami, Dade County, by J. Sparrow (DPI, FDACS). Parlatoria ziziphi (Lucas), Homoptera: Diaspididae, was

(DPI, FDACS). Parlatoria ziziphi (Lucas), Homoptera: Diaspididae, was identified by A. B. Hamon (DPI, FDACS) on October 11, and the identification was confirmed by D. R. Miller (SEL, BBII, ARS) and V. L. Blackburn (PPQ) on October 29. Besides Hawaii and Puerto Rico, this scale generally occurs in South America and the Old World. This pest contaminates citrus fruit, causes twig dieback and leaf and fruit drop, and deforms fruit.

An NPAG ad hoc committee evaluated the pest on October 15, 1985. The committee submitted its recommendations on actions to Deputy Administrator H. L. Ford (PPQ) on December 3, whose decision is pending. Eight points were considered pertinent to the recommendations.

1. Because black parlatoria scale is economically important to citrus in several countries, infestations in Florida would probably cause some economic impact to its citrus industry. A previous study group rated this scale as a moderate pest.

2-3. This species is distributed through most of the Caribbean. Commodities and travelers from the Caribbean frequently enter the United States.

4. Several introductions could potentially occur in future years.

5. Exact distribution in the State is needed.

6-8. The effect of current pest management practices on this scale and the effect of its control programs on current biological control activities are unknown. Biological control agents specific for this scale are unknown but general predators and parasites are known.

Surveys during late October in about 54 sq km revealed infestations in 106 properties on about 3.6 sq km in a mainly residential area of northern Miami. The 2-km buffer area surrounding the infestations has been established. Parasites have been found in the infested area.

The Black Parlatoria Scale Technical Advisory Committee met on December 9, 1985, to discuss options available for dealing with this scale. They reviewed survey activities, biological control possibilities, preliminary results of chemical control tests, and USDA requirements for commercial imports of citrus from countries infested with this scale.

UPDATES ON ACTIONS AGAINST NEW PESTS

CITRUS CANKER STATUS IN FLORIDA

Citrus canker, caused by Xanthomonas campestris pv. citri (Hasse) Dye, was confirmed at three new infestation sites in Florida: a greenhouse in a citrus nursery in Polk County on October 5, 1985; a 19-ha citrus nursery in Zellwood (Tangerine), Orange County, on October 14; and a nursery near Sebring,

Highlands County, on December 30. The Orange County find is the first for that county. Infestation sites detected through December 30 total 17 commercial nurseries and 2 groves (infected resets).

Citrumelo and Poncirus trifoliata (trifoliolate-orange) are suspected of being the preferred hosts for the citrus canker bacterium present in Florida. Surveys of commercial groves planted on these rootstocks continue. Results will be used to further evaluate whether these rootstocks may have served as a source of inoculum in the present canker epidemic.

Imported, dried Citrus hystrix leaves were suspected as a carrier of this pathogen until lesions on leaves of this species tested positive for strain A of the bacterium. PPQ has taken action to prevent further entry of dried citrus leaves at ports of entry. Federal and State regulatory officials are also removing this material at the retail level.

Specialty fruit, such as tangerines, from groves near infested properties will be allowed to move to the Northeastern States under permit. Federal regulations were amended to allow Florida citrus to move to northern Louisiana.

Based on recommendations by the Special Task Force on Citrus Canker, and amended by the Citrus Canker Technical Advisory Committee on November 22, the following revised policies were implemented beginning November 25.

1. Limit movement of citrus nursery stock to specified locations under strict conditions.
2. More closely monitor and regulate the cutting and movement of citrus budwood. Procedures are (a.) inspect and witness the cutting of nonregistered, as well as registered, budwood, (b.) limit the number of budwood cutters in scion groves to restrict interaction between groves and nurseries, and (c.) register budwood cutters, train them in proper decontamination procedures, and monitor their movement.
3. Amend exposed tree destruction and grove replanting policies to reflect special conditions, such as type of planting, period exposed trees have been in groves, and buffer zones between the exposed grove and a grove of different ownership.

ORIENTAL FRUIT FLY QUARANTINES

U.S. Department of Agriculture quarantined parts of three California counties to prevent the spread of oriental fruit fly, Dacus dorsalis Hendel (Diptera: Tephritidae): Los Angeles and Orange on October 18, 1985, and farther north in Santa Clara on November 19. Actions for Los Angeles County were reported in PPIU--October 1985. In Santa Clara County, the infestation was detected in Sunnyvale. There, 20 males, 6 females, and 14 larvae were recovered from October 8 to 28; intensive trapping continues. Male annihilation has been implemented in the 31-sq-km area. Bait sprays were applied and fruit stripped from larval sites and adjacent properties. Soil drench was applied to all larval sites.

AFRICANIZED HONEY BEE NEUTRALIZED

Africanized honey bee, Apis mellifera scutellata Lepeletier (Hymenoptera: Apidae) has been neutralized in California. The Africanized traits are believed under control because the Africanized gene pool has been greatly diluted by Africanized honey bee breeding with native European honey bees and because State and Federal workers have located and destroyed highly Africanized colonies. In summary, the infestation involved 12 Africanized colonies (7 from apiaries and 5 in feral swarm nests) in Kern County. The first colony was detected in mid-June 1985; the last, on November 19. Over 22,000 samples from commercial and wild colonies were tested.

REGULATION AND TREATMENT FOR TWO SNAILS

The two new snails in California infest five separate areas in San Diego County. White garden snail, Theba pisana (Muller), and another helicid snail, Helicella maritima (Draparnaud), Stylommatophora: Helicidae, were detected in San Diego in August 1985 (PPIU--October 1985). Survey and Emergency Response Staff and Field and Operations Support Staff, National Program Planning Staff, submitted a draft on survey, regulation, and control recommendations for these snails to Western Region, PPQ, on December 4. From this document, CDFA and the Western Region, PPQ, are preparing joint recommendations for future action.

POTENTIAL OF CORN CYST NEMATODE TO INCREASE

Corn cyst nematode, Heterodera zeae Koshy, Swarup, and Sethi (Tylenchida: Heteroderidae), is potentially more serious than was believed a year ago when PPQ invoked a quarantine on the nematode. Laboratory research indicates that populations of this nematode can increase in the warmer soils in States south of Maryland. In the colder soils from Maryland northwards, populations would not be expected to increase but would survive. Surveys in Maryland in all except the three westernmost counties have revealed its presence only in the four quarantined counties: Cecil, Harford, Kent, and Queen Annes (Last reported in PPIU--April 1984).

ACTIONS FOR HIBISCUS MEALYBUG IN HAWAII

Hibiscus mealybug, a new polyphagous pest on Oahu Island, Hawaii, was last reported in PPIU--July 1985. Mr. Ford directed on December 9, that PPQ will take the following actions against Maconellicoccus hirsutus (Green), Homoptera: Pseudococcidae.

1. Propose no eradication activities.
2. Determine the need to amend Quarantine 13 to preclude free host movement to the U.S. mainland.
3. Advise Hawaii of actions being taken and suggest to Hawaii that interisland regulations may relieve mainland shipment problems.
4. Determine if fumigations or chemical applications are available for commodities moving to the U.S. mainland.

5. Inform our PPQ Western Region that this mealybug is a pest of concern and that we would like assurance that inspectional procedures preclude its movement to the U.S. mainland.
6. Request that the Western Regional Director, PPQ, determine the presence of nurseries in the infested area in Hawaii and determine the volume of recent (1982 to present) movement of propagative material from Hawaii to the U.S. mainland, especially its hosts.
7. Determine the need for followup surveys on the U.S. mainland as a result of the introduction of propagative material from Hawaii.
8. PPQ has also requested that ARS determine the possibility of research on host range in its native habitat and the effectiveness of natural controls.

THRIPS FEEDS IN ORCHIDS

The polyphagous Thrips palmi Karny, Thysanoptera: Thripidae, introduced into Oahu Island, Hawaii (Last reported in PPIU--July 1985), has spread to the islands of Maui, Molokai, and Hawaii. Also, Dendrobium orchid was confirmed as a new host record for the State. Its feeding in the throat of the orchid makes the thrips more difficult to detect and kill.

CORRECTION TO NEEDLECAST OF EUROPEAN LARCH

The note for Mycosphaerella laricina (Hartig), Ascomycetes: Dothideales: Mycosphaerellaceae, in PPIU--July 1985 needs to be corrected. Point 7 should read, "Dithane was effective in control studies on Mycosphaerella larici-leptolepis, which causes a needlecast on larch, in Korea."

Please telephone identifications of plant pests new to the United States to the NPAG Executive Secretary on (301) 436-7472. Information may be sent to the NPAG Executive Secretary at Biological Assessment Support Staff, National Program Planning Staff, PPQ, APHIS, USDA, Room 633, Federal Building, Hyattsville, MD 20782. Comments improving this report are appreciated. Corrections of a substantive nature will be noted.